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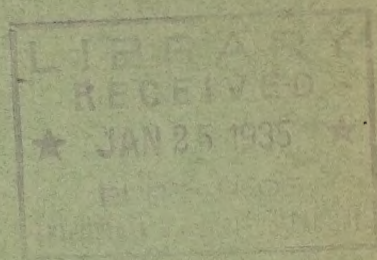
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UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE  
INSECTICIDE DIVISION

Patent List No. 36



A LIST OF  
UNITED STATES PATENTS  
Issued from 1917 to 1933 inclusive  
relating to  
APPARATUS FOR WASHING INSECTICIDE RESIDUES  
FROM FRUITS AND VEGETABLES  
PART I TANK WASHERS

Compiled by

R. C. Roark

Washington, D. C.  
November, 1934.



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A LIST OF UNITED STATES PATENTS ISSUED FROM 1917 TO 1933, INCLUSIVE,  
RELATING TO APPARATUS FOR WASHING INSECTICIDE RESIDUES FROM FRUITS AND VEGETABLES

Compiled by

R. C. Roark  
Insecticide Division, Bureau of Entomology and Plant Quarantine

The thirty-two devices referred to in this list are classified by the Patent Office under the designation "Tank Washers." Although most of them are designed for cleaning vegetables for household marketing or canning purposes, they can be used for washing fruit that has been sprayed with lead arsenate or other poisonous insecticides.

Every effort has been made by the compiler to make this list of patents complete and no discrimination is intended against any patent mention of which is inadvertently omitted.

The Department of Agriculture assumes no responsibility for the merits or workableness of any of the patents, nor does it recommend any of the inventions listed.

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1,210,853 (Jan. 2, 1917; appl. Apr. 23, 1915). VEGETABLE-WASHING MACHINE. Charles A. Schettler, Cleveland, Ohio. - A machine for washing vegetables and particularly roots or tubers such as potatoes, beets, or carrots is described.

1,245,767 (Nov. 6, 1917; appl. July 19, 1917). FRUIT-WASHER. Frank C. Randall, Benton Harbor, Mich. - A washer for fruits, vegetables, etc., comprises a perforated receptacle with a dome-shaped cover, the whole being so shaped that a current of water entering at the apex of the dome will circulate about the sides of the vessel in a manner to agitate and wash the fruits or the like contained therein. This is an improvement over the device described in U. S. patent 1,161,727 issued Nov. 23, 1915, to F. C. Randall.

1,245,768 (Nov. 6, 1917; appl. Sept. 14, 1917). FRUIT-WASHER. Frank C. Randall, Benton Harbor, Mich. - A fruit or vegetable washer adapted particularly for use in direct connection with an ordinary sink faucet, while at the same time it is adapted for use in connection with any ordinary hose or faucet connection is described. It is of the same general character as that described in U. S. patent 1,161,727 issued Nov. 23, 1915, to F. C. Randall.

1,246,223 (Nov. 13, 1917; appl. June 21, 1916). PROCESS FOR REMOVING THE SKIN FROM DRIED FRUITS. Hermanus A. Beekhuis, Hanford,



Calif., - California Peach Growers. - A process and apparatus for peeling and cleaning dried fruits such as peaches, apricots and nectarines comprises immersing the fruit in a boiling solution of one part of bicarbonate of soda in fifty parts of water for about three minutes, draining, and rotating the fruit in a cylinder containing an oppositely rotating spiral brush.

1,248,214 (Nov. 27, 1917; appl. July 23, 1917). TOMATO-SCALDER. Jacob P. Walker, Havre De Grace, Md. - A machine for both washing and scalding tomatoes, preparatory to canning thereof is described.

1,257,574 (Feb. 26, 1918; appl. May 26, 1917). DEVICE FOR WASHING FRUIT. Alphonse F. Bisceglia, San Jose, Calif. - A device for the purpose of washing fruit such as apples, oranges, lemons, or peaches, or vegetables, before passing the same for canning or packing for market is described.

1,269,966 (June 18, 1918; appl. Feb. 19, 1918). APPARATUS FOR TREATING RAISINS. Artemas P. Shepard, Fresno, Calif. - A machine for washing dried raisins is described.

1,273,268 (July 23, 1918; appl. Apr. 8, 1918). VEGETABLE-WASHING MACHINE. August Franke, North Detroit, Mich. - A hand or power operated machine for washing vegetables, particularly beets, turnips and the like to which earth adheres, comprises a tumbling barrel or drum in which the vegetables are placed, said tumbling barrel or drum being supported by a tiltable frame on a tub or suitable receptacle in which may be placed water for washing the vegetables within the tumbling barrel.

1,278,547 (Sept. 10, 1918; appl. Apr. 23, 1918). FRUIT CLEANER, DIPPER, AND GRADER. Frederick J. Yandle, Santa Rosa, Calif. - Fruit is placed in a receiving hopper, whence it is discharged through a regulated opening onto a resiliently supported cleaning screen which also serves to conduct the fruit to the dipping mechanism, which in turn discharges it into a resiliently supported grading mechanism.

1,325,847 (Dec. 23, 1919; appl. May 14, 1918). METHOD OF PEELING FOOD PRODUCTS. Emil C. Horst, San Francisco, Calif. - A method of peeling food products such as fruits, vegetables and the like consists in first confining the mass in a closed container, then admitting steam into the container to scald the mass, then permitting the steam to escape, and finally subjecting the mass to radial streams of water under pressure during rotation of the container, the water being impacted against the mass only from below the axis of rotation of the container.

1,345,607 (July 6, 1920; appl. Aug. 11, 1919). MACHINE FOR PREPARING FRUIT FOR DRYING. Fred E. Lester, Near San Jose, Calif. - A machine for washing prunes before and after dipping in a lye solution is described.



1,346,315 (July 13, 1920; appl. Sept. 12, 1919). PRUNE-TREATING MACHINES. August Kilfiker, Salem, Ore. - This invention may be said to relate to shaking trays for drying fruit, although it includes in its construction washing and rinsing means which render the drying desirable.

1,373,113 (Mar. 29, 1921; appl. Nov. 28, 1919). FRUIT-DIPPING MACHINE. Walter W. Beardsley, Salem, Ore. - This invention relates to machines in which fruit or vegetables are placed to be dipped into tanks of hot and cold water preparatory to canning.

1,381,347 (June 14, 1921; appl. Mar. 13, 1920). PROCESSING MACHINE FOR FRUITS AND VEGETABLES. William F. Schaller, San Francisco, Calif. - This invention relates to a fruit processing machine in which the fruit is first measured into wire baskets, then dipped in a hot solution of some character, removed from the solution and then dipped in a washing solution and finally dumped out upon a spiked roller which perforates the skin to permit the proper evaporation from the fruit of the water in the fruit juices.

1,401,437 (Dec. 27, 1921; appl. Dec. 9, 1919). DIPPING APPARATUS. John W. Pearson, San Francisco, Calif. - This invention provides means for submerging and withdrawing a tray of fruit from a bath after a predetermined submersion.

1,475,419 (Nov. 27, 1923; appl. Aug. 14, 1923). PRUNE DIPPER AND GRADER. Elmer S. Anderson, San Jose, Calif. - Anderson-Barn-Grover Mfg. Co., San Jose, Calif. - This dipper and grader for prunes or like fruit includes a shaker provided with a dirt screen for removing dirt and small foreign particles.

1,486,333 (Mar. 11, 1924, appl. Sept. 8, 1922.) VEGETABLE AND FRUIT WASHER. Ella Hanford, Chicago, Ill. - A washer for fruits and vegetables comprises a perforated receptacle the cover of which is provided with a funnel below which there is a spreader plate to prevent splashing when a solid stream of water is run in through the funnel from a faucet or tap.

1,498,314 (June 17, 1924; appl. Oct. 22, 1923). FRUIT-TREATING MACHINE. Russel W. Ashley and Jay A. Ashley, Yuba City, Calif. - This machine comprises means for dipping fruit to be dehydrated in checking solution, (heated lye), rinsing and discharging upon trays.

1,499,443 (July 1, 1924; appl. Oct. 1, 1923). FRUIT DIPPING AND CLEANING APPARATUS. Frank C. Chapman, Modesto, Calif. - A machine for dipping prunes in lye, washing them, and spreading them on trays to dry is described.



1,583,716 (May 4, 1926; appl. July 2, 1925). PRUNE SPREADER. Frederick E. Howe, Falls City, Ore. - This invention relates to machines for washing, draining and spreading prunes upon trays for drying.

1,633,437 (June 21, 1927; appl. Jan. 26, 1926). VEGETABLE-WASHING MACHINE. Cecil C. Daniels, Weslaco, Tex. - F. W. Stephens and Luther Hughes, Weslaco, Tex. - A machine for cleaning vegetables and particularly adapted and intended to free roots such as beets, turnips, potatoes or other roots from the dirt which clings to them when dug or pulled from the ground is described.

1,646,690 (Oct. 25, 1927; appl. Apr. 14, 1926). VEGETABLE WASHER. Vernon A. Doty, West Springfield, Mass. - A vegetable washer including a washing basket together with means for automatically raising and lowering the same in a tub of water whereby to thoroughly cleanse the vegetables contained within said basket is described.

1,655,145 (Jan. 3, 1928; appl. Nov. 14, 1925; renewed Oct. 22, 1927). WASHING, GRINDING, AND EXHIBITING DEVICE. Monroe Harrison, Chicago, Ill. - A machine for advertising fruit juices or drinks (e.g. orange juice) provides means for washing and grinding the fruit.

1,676,714. (July 10, 1928; appl. Feb. 9 1927). FRUIT-CLEANING MACHINE. Frank E. Smallidge, Wenatchee, Wash. - A mechanism for use in subjecting fruit to be cleaned to a chemical bath and then carrying the same to a cleaning or rinsing jar and subsequently through the drying area is described.

1,705,544 (Mar. 19, 1929; appl. Jan. 23, 1925). MACHINE FOR WASHING FRUITS AND VEGETABLES. John Schmidt, Hoopeston, Ill. - Sprague-Sells Corp., Hoopeston, Ill. - A machine for washing and treating fruits and vegetables prior to canning utilizes a body of water agitated by means of jets of air discharged within the body of water in which the fruit or vegetables are immersed or floating.

1,721,537 (July 23, 1929; appl. Apr. 6, 1927). HYDRAULIC FRUIT-TREATING MACHINE AND METHOD. Edward A. White, Lewiston, Idaho. - A device for removing poison sediment from fruit comprises a tank containing a weak solvent for the sediment, through which the fruit is conveyed, and, if desired, a spraying device for the solvent to be used in conjunction with the tank.

1,748,872 (Feb. 25, 1930; appl. Mar. 9, 1928). FRUIT-WASHING MACHINE. Treffle Farley, Yakima, Wash. - Henry Poulin and William McGonagle, Yakima, Wash. - This invention relates to a machine or apparatus for washing of fruit particularly apples, so as to thoroughly cleanse the same for marketing.

1,754,612 (Apr. 15, 1930; appl. Oct. 11, 1926). LIQUID-BATH APPARATUS. Charles B. Cook, Los Angeles, Calif. - A novel method of



preparing citrus fruit for market wherein liquid such as water or borax solution is forced into the pores of the fruit and wherein the liquid is preferably at a temperature of over 100° F. is described.

1,804,099 (May 5, 1931; appl. Mar. 1, 1929). KITCHEN UTENSIL. Lillie Hazy, New York, N. Y. - A device for use in cleaning or washing spinach or other vegetables or fruits which have to be immersed in water to eliminate sand, dirt, etc., may be set in a sink for instance, under the water spigot, so that the vegetables or fruit may be automatically washed when the water is turned on to the same, and this without discharging the dirt, sand, skins, or the like into the sink. The vegetables or fruits can be dried after rinsing in the same container.

1,826,015 (Oct. 6, 1931; appl. May 26, 1930). FRUIT WASHER. Alberta I. Morton, New York, N. Y. - A fruit washer which will thoroughly clean the fruit and separate therefrom automatically all dirt, leaves, bugs, twigs and other foreign substances is described.

1,856,945 (May 3, 1932; appl. June 25, 1929). FRUIT PROCESSING MEANS. John C. Currier and Charles W. Lipe, San Jose, Calif. - A device for subjecting fruits, etc., to a liquid bath is described.

1,881,611 (Oct. 11, 1932; appl. Jan. 19, 1931). FRUIT WASHER. Sylvanus Hynes, Canon City, Colo. - A fruit washer to dissolve poison sediment and to clean the fruit, e.g. apples, wherein the fruit is first cleaned by an acid solution and then rinsed in fresh water and wherein a novel means is provided for transferring the fruit from the acid bath to the rinsing bath is described.

#### ASSIGNEE INDEX

(Numbers refer to patents cited)

Anderson-Barn-Grover Mfg. Co., 1,475,419  
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